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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,537	02/07/2001	John G. Noetzel	DP-302911 (DEP-0152)	5043

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EXAMINER

CHANEY, CAROL DIANE

ART UNIT PAPER NUMBER

1745

DATE MAILED: 03/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/778,537

Applicant(s)

NOETZEL ET AL.

Examiner

Carol Chaney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 and 31-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 31-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Objections***

Claims 50-56 are objected to because of the following informalities: Applicants' claims 50-56 are examined as if directed to a method of using a computer to control the amount of reformat delivered to a fuel cell. A "computer data signal" as claimed would encompass electrons, which does not appear to be applicants' invention. *Appropriate correction is required.*

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-28, and 31-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Okada et al., US Patent 6,266,576 for the reasons of record given in the office action mailed 02 October 2002.

***Claim Rejections - 35 USC § 103***

Claims 43-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al. for the reasons of record given in the office action mailed 02 October 2002.

***Response to Arguments***

Applicant's arguments filed 23 December 2002 have been fully considered but they are not persuasive.

Applicants assert Okada et al. do not disclose each of the elements of the instant invention. It is noted that anticipation does not require the prior art reference and the applicants to describe the same invention in the same manner. The Court of Customs and Patent Appeals has long recognized that an invention may be described in different ways and still be the same invention. See *Kennecott Corp. v. Kyocera International, Inc.* 5 USPQ2d 1194 (CFAC 12-22-87) and *In re Kirscher*, 134 USPQ 324 (CCPA 1962). Furthermore, in order to anticipate a claimed process, a reference need not disclose all effects that are inherent in a process. (See *Ex parte Johnston*, 118 USPQ 238.)

Applicants contend that Okada et al. do not disclose or teach [a method of controlling reformat by], receiving a controllable valve position signal from a controllable valve. However, as discussed in Okada et al. at column 8, lines 36-48, and shown in Figure 1, the pressure regulator (11) is a controllable valve which includes a control loop. The control system inherently requires receipt of a signal corresponding to the position of the controllable valve in order to operate.

With regard to claim 3, applicants contend that Okada et al. do not disclose or teach, "said actuating [of a controllable valve] is in response to a desired controllable valve position value". It is the position of the examiner that the process of "actuating a

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controllable valve in response to a desired controllable valve position value" describes adjusting the flow through a valve, which is inherent to the Okada et al. disclosure.

With regards to claims 6, 45 and 52, applicants contend that Okada et al. do not disclose or teach "said actuating is responsive to a controllable valve position error." Applicants further contend Okada et al. do not disclose or teach, "said controllable valve position error is responsive to the difference between a controllable valve position signal and a desired controllable valve position value." With regard to claims 10, 11, 46 and 53, Applicants contend that Okada et al. do not disclose or teach "said actuating is responsive to a controllable valve command" and do not disclose "said controllable valve command is responsive to a controllable valve position error." However, Okada et al. disclose closed-loop feed-forward and feed-back control systems. (Note column 10, lines 1-9 and lines 43-52.) Closed loop control systems compare a desired value of a parameter (e.g. valve position) with a deviation or error in the measured value of that parameter. Note *Perry's Chemical Engineers' Handbook*, pages 8-4 to 8-5 for a definitions of feed-forward and feed-backward control systems. A rejection is not being made over the Perry's reference; it is being cited for its definition of terms used in the Okada et al. reference. The disclosure by Okada et al. of control systems inherently discloses applicants' claim limitations requiring valve position adjustment in response to valve position errors.

With regard to claims 17, 37, 47 and 54 applicants contend that Okada et al. do not disclose "receiving a metered reformat pressure signal representative of the metered reformat pressure" and do not teach "actuating said controllable valve in

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response to said ... metered reformat pressure signal..." However, it is clear from Figure 1 that the pressure of reformat in the hydrogen reservoir (12) is measured, and signals representative of the pressure are generated and sent to the control systems, which eventually actuate the valve (11).

Applicants contend that Okada et al. do not disclose the limitation of instant claim 25 "said controllable valve command is in response to a desired controllable valve position value" and do not teach the limitations of claims 28, 31 and 32 "said controllable valve command is responsive to a controllable value position error" and "said controllable valve position error is responsive to the difference between a controllable valve position signal and a desired controllable valve position value." As discussed above, closed loop control systems require comparison of the desired or set point value of a controlled variable, e.g. "a desired controllable valve position value" with an actual value of the variable, e.g. "controllable valve position value" to determine the error or difference between the two values. The value of the error then used to determine the amount of adjustment made to the controlled variable. (See *Perry's Chemical Engineers' Handbook*, pages 8-4 to 8-5.)

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within


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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol Chaney whose telephone number is (703) 305-3777. The examiner can normally be reached on Mon - Fri 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 703-308-2383. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Carol Chaney  
Primary Examiner  
Art Unit 1745

cc  
March 9, 2003